

Flight-Testing Newton's Laws			
2007 Mathematics			
Curriculum Standards			
South Carolina Mathematics			
Grades 9-12 (Elementary Algebra)			
Activity/Lesson	State	Standards	
Session-10 (1-5)	SC	MA.9-12.EA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-10 (1-5)	SC	MA.9-12.EA-2.6	Carry out a procedure to evaluate an expression by substituting a value for the variable.
Session-10 (1-5)	SC	MA.9-12.EA-3.7	Carry out a procedure to solve literal equations for a specified variable.
Session-1 (1-17)	SC	MA.9-12.EA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-1 (1-17)	SC	MA.9-12.EA-2.6	Carry out a procedure to evaluate an expression by substituting a value for the variable.
Session-1 (1-17)	SC	MA.9-12.EA-3.7	Carry out a procedure to solve literal equations for a specified variable.
Session-2 (1-10)	SC	MA.9-12.EA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-2 (1-10)	SC	MA.9-12.EA-2.6	Carry out a procedure to evaluate an expression by substituting a value for the variable.
Session-2 (1-10)	SC	MA.9-12.EA-3.7	Carry out a procedure to solve literal equations for a specified variable.
Session-3 (1-6)	SC	MA.9-12.EA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-3 (1-6)	SC	MA.9-12.EA-2.6	Carry out a procedure to evaluate an expression by substituting a value for the variable.
Session-3 (1-6)	SC	MA.9-12.EA-3.7	Carry out a procedure to solve literal equations for a specified variable.
Session-4 (1-11)	SC	MA.9-12.EA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-4 (1-11)	SC	MA.9-12.EA-2.6	Carry out a procedure to evaluate an expression by substituting a value for the variable.
Session-4 (1-11)	SC	MA.9-12.EA-3.7	Carry out a procedure to solve literal equations for a specified variable.
Session-5 (1-6)	SC	MA.9-12.EA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-5 (1-6)	SC	MA.9-12.EA-2.6	Carry out a procedure to evaluate an expression by substituting a value for the variable.
Session-5 (1-6)	SC	MA.9-12.EA-3.7	Carry out a procedure to solve literal equations for a specified variable.
Session-6 (1-8)	SC	MA.9-12.EA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-6 (1-8)	SC	MA.9-12.EA-2.6	Carry out a procedure to evaluate an expression by substituting a value for the variable.

Session-6 (1-8)	SC	MA.9-12.EA-3.7	Carry out a procedure to solve literal equations for a specified variable.
Session-7 (1-5)	SC	MA.9-12.EA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-7 (1-5)	SC	MA.9-12.EA-2.6	Carry out a procedure to evaluate an expression by substituting a value for the variable.
Session-7 (1-5)	SC	MA.9-12.EA-3.7	Carry out a procedure to solve literal equations for a specified variable.
Session-8 (1-9)	SC	MA.9-12.EA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-8 (1-9)	SC	MA.9-12.EA-2.6	Carry out a procedure to evaluate an expression by substituting a value for the variable.
Session-8 (1-9)	SC	MA.9-12.EA-3.7	Carry out a procedure to solve literal equations for a specified variable.
Session-9 (1-7)	SC	MA.9-12.EA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-9 (1-7)	SC	MA.9-12.EA-2.6	Carry out a procedure to evaluate an expression by substituting a value for the variable.
Session-9 (1-7)	SC	MA.9-12.EA-3.7	Carry out a procedure to solve literal equations for a specified variable.
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2007 Mathematics			
Curriculum Standards			
South Carolina Mathematics			
Grades 9-12 (Intermediate Algebra)			
Activity/Lesson	State	Standards	
Session-10 (1-5)	SC	MA.9-12.IA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-10 (1-5)	SC	MA.9-12.IA-2.6	Apply a procedure to write the equation of a composition of given functions.
Session-10 (1-5)	SC	MA.9-12.IA-3.5	Analyze given information (including quadratic models) to solve contextual problems.
Session-1 (1-17)	SC	MA.9-12.IA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-1 (1-17)	SC	MA.9-12.IA-3.5	Analyze given information (including quadratic models) to solve contextual problems.
Session-2 (1-10)	SC	MA.9-12.IA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-2 (1-10)	SC	MA.9-12.IA-2.6	Apply a procedure to write the equation of a composition of given functions.
Session-2 (1-10)	SC	MA.9-12.IA-3.5	Analyze given information (including quadratic models) to solve contextual problems.
Session-3 (1-6)	SC	MA.9-12.IA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-3 (1-6)	SC	MA.9-12.IA-3.5	Analyze given information (including quadratic models) to solve contextual problems.
Session-4 (1-11)	SC	MA.9-12.IA-1.3	Apply algebraic methods to solve problems in real-world contexts.

Session-4 (1-11)	SC	MA.9-12.IA-2.6	Apply a procedure to write the equation of a composition of given functions.
Session-4 (1-11)	SC	MA.9-12.IA-3.5	Analyze given information (including quadratic models) to solve contextual problems.
Session-5 (1-6)	SC	MA.9-12.IA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-5 (1-6)	SC	MA.9-12.IA-2.6	Apply a procedure to write the equation of a composition of given functions.
Session-5 (1-6)	SC	MA.9-12.IA-3.5	Analyze given information (including quadratic models) to solve contextual problems.
Session-6 (1-8)	SC	MA.9-12.IA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-6 (1-8)	SC	MA.9-12.IA-2.6	Apply a procedure to write the equation of a composition of given functions.
Session-6 (1-8)	SC	MA.9-12.IA-3.5	Analyze given information (including quadratic models) to solve contextual problems.
Session-7 (1-5)	SC	MA.9-12.IA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-7 (1-5)	SC	MA.9-12.IA-2.6	Apply a procedure to write the equation of a composition of given functions.
Session-7 (1-5)	SC	MA.9-12.IA-3.5	Analyze given information (including quadratic models) to solve contextual problems.
Session-8 (1-9)	SC	MA.9-12.IA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-8 (1-9)	SC	MA.9-12.IA-3.5	Analyze given information (including quadratic models) to solve contextual problems.
Session-9 (1-7)	SC	MA.9-12.IA-1.3	Apply algebraic methods to solve problems in real-world contexts.
Session-9 (1-7)	SC	MA.9-12.IA-3.5	Analyze given information (including quadratic models) to solve contextual problems.

Flight-Testing Newton's Laws

2007 Mathematics

Curriculum Standards

South Carolina Mathematics

Grades 9-12 (Geometry)

Activity/Lesson State Standards

Session-10 (1-5)	SC	MA.9-12.G-2.4	Use direct measurement to determine the length of a segment, degree of an angle, and distance from a point to a line.
Session-7 (1-5)	SC	MA.9-12.G-2.3	Use the congruence of line segments and angles to solve problems.

Flight-Testing Newton's Laws

2007 Mathematics

Curriculum Standards

South Carolina Mathematics

Grades 9-12 (Precalculus)

Activity/Lesson State Standards

Session-10 (1-5)	SC	MA.9-12.PC-2.5	Analyze graphs, tables, and equations to determine the domain and range of parent functions or transformations of parent functions (including $y = x$ to the n th power, $y = \log$ base a of x , $y = \ln x$, $y = 1/x$, $y = e$ to the x power, $y = a$ to the x power, $y = \sin x$, $y = \cos x$, $y = \tan x$, $y = \csc x$, $y = \sec x$, and $y = \cot x$).
Session-2 (1-10)	SC	MA.9-12.PC-2.5	Analyze graphs, tables, and equations to determine the domain and range of parent functions or transformations of parent functions (including $y = x$ to the n th power, $y = \log$ base a of x , $y = \ln x$, $y = 1/x$, $y = e$ to the x power, $y = a$ to the x power, $y = \sin x$, $y = \cos x$, $y = \tan x$, $y = \csc x$, $y = \sec x$, and $y = \cot x$).
Session-4 (1-11)	SC	MA.9-12.PC-2.5	Analyze graphs, tables, and equations to determine the domain and range of parent functions or transformations of parent functions (including $y = x$ to the n th power, $y = \log$ base a of x , $y = \ln x$, $y = 1/x$, $y = e$ to the x power, $y = a$ to the x power, $y = \sin x$, $y = \cos x$, $y = \tan x$, $y = \csc x$, $y = \sec x$, and $y = \cot x$).
Session-5 (1-6)	SC	MA.9-12.PC-2.5	Analyze graphs, tables, and equations to determine the domain and range of parent functions or transformations of parent functions (including $y = x$ to the n th power, $y = \log$ base a of x , $y = \ln x$, $y = 1/x$, $y = e$ to the x power, $y = a$ to the x power, $y = \sin x$, $y = \cos x$, $y = \tan x$, $y = \csc x$, $y = \sec x$, and $y = \cot x$).
Session-6 (1-8)	SC	MA.9-12.PC-2.5	Analyze graphs, tables, and equations to determine the domain and range of parent functions or transformations of parent functions (including $y = x$ to the n th power, $y = \log$ base a of x , $y = \ln x$, $y = 1/x$, $y = e$ to the x power, $y = a$ to the x power, $y = \sin x$, $y = \cos x$, $y = \tan x$, $y = \csc x$, $y = \sec x$, and $y = \cot x$).
Session-6 (1-8)	SC	MA.9-12.PC-5.9	Carry out a procedure to calculate the area of a triangle when given the lengths of two sides and the measure of the included angle.
Session-7 (1-5)	SC	MA.9-12.PC-1.2	Connect algebra and trigonometry with other branches of mathematics.
Session-7 (1-5)	SC	MA.9-12.PC-2.5	Analyze graphs, tables, and equations to determine the domain and range of parent functions or transformations of parent functions (including $y = x$ to the n th power, $y = \log$ base a of x , $y = \ln x$, $y = 1/x$, $y = e$ to the x power, $y = a$ to the x power, $y = \sin x$, $y = \cos x$, $y = \tan x$, $y = \csc x$, $y = \sec x$, and $y = \cot x$).